

Storm Clouds back in business  
Lunar Eclipse  
American River College Water Speakers

The storm track has reopened over the west coast. We are looking at rain nearly each day through this weekend. Sierra snow could exceed 3 feet by Monday morning!

The next system is a 996mb low for Thursday night/ Friday. The strongest jet approach is 145 knots at 10pm Thursday night off Sonoma Co. That indicates a pretty good shot of moisture for central and southern CA; both coasts and mountains. The snow level with this will vary from 3,500' to 5,000' during the event, with the Feather River average snow level at 4,500'. It starts snowing up and down the Sierra at about 4pm Thursday, and won't basically stop till Friday night. Winds will be strong for this system, and it is reinforced with a shortwave entering the flow pattern on Friday. Onshore winds at 850mb will range from 30-40 knots out of the south/ southeast (35-46mph), and 700mb winds will be west to southwest at 40-50 knots for the northern half of the state.

Saturday and Sunday bring another, juicier low across California. This will be very windy and wet. The long distance fetch that is conveying these lows into California is a jet that has stretched all the way back to Asia in one long, rare zonal jet stream. The weekend system is the crescendo of the increasing waves we've seen, starting yesterday. And after Sunday's climax, its back to the dry....

Anyway, getting back to our weekend storm.... Warm air advection gets things started Saturday. The low deepens to 976mb at the surface, ushering big winds for Saturday night at 10pm as follows: Coast and Shasta 700mb SW winds to 60-80 knots (70-90mph), with 850mb winds to 40-60knots (46-57mph) out of the south. This makes for high swells, good orographics, and very poor driving conditions. This may not pack exactly the same wallop as the early January storm, but it will be a good snow producer, and may lead to locally heavy downpours. The snow level will be about 4,000' over the Northern Sierra. The strong winds die down Saturday night, but on Sunday morning the North Coast will again see gusty winds up to 70mph just off shore. The storm persists through Sunday.

10-day quantitative precip forecast for the Northern Sierra 8 Station index (Mt. Shasta City, Shasta Dam, Mineral, Brush Creek, Quincy, Sierraville, Pacific House, and Blue Canyon) is 2.69", with the Feather River Basin expected to pick up 3.9", possibly more.

NOAA'S Hydrometeorological Testbed Project finds these 2 systems worth investigation, especially the weekend one. The potential is there for "Atmospheric Rivers" or moisture/energy transport surges that can lead to flooding. Intensive Operational periods 7 and 8 will take place over the American River Basin over the next 5 days, but the extent of observation will assist prediction over a much broader portion of the state.

Current hydrologic numbers: The 8 Station stands at 55% of a normal water year, with 27.5" out of a normal 50". Last year at this time, we were at 22.9", or 71% of average. The Northern Sierra Snowpack water content is at 111% of normal, 26"; the Central at 95% of normal, 24"; the Southern at 108% of normal, 21". This gives a statewide average snowpack water content of 24", or 103% of normal. January and current systems have had very agreeable snow levels. The next Snow Survey will take place Thursday, February 28th.

There will be a total lunar eclipse tonight! Hopefully today's drying skies will give as a good view. Actually, the 7-7:52pm outlook for the Sacramento area should be decent. High clouds area a possibility, but should be increasing the hours after the eclipse. Cross your fingers, and try to give this one a look. After 3 years of a lunar eclipse each year, we now won't get another till December 20/21, 2010! Tonight's sunset in Sac is at 5:49pm, with the moon rising at about the same time; 5:41pm toward the northeast. A lovely full moon it should be, too. The eclipse will be visible to all moon-facing Earthlings at the same time.

The total eclipse lasts 52 minutes, starting at 7:00pm locally, but the minutes prior and following offer that great crescent shape of the Earth's shadow over an orangish-red moon.

On Saturday, February 23rd, American River College will be hosting "Squeezed Dry, California's Water Future," as the first Community Lecture and Concert Series. Panelists will be Elissa Lynn, DWR; Martha Lennihan, Water Attorney; Dennis O'Connor, CA State Senate Natural Resources and Water Committee; and Rita Schmidt Sudman, Water Education Foundation. The public is welcome and the talks run from 2-4pm, with questions from the audience. A variety of topics will be covered for general audiences in the Main Theater on College Oak between Madison and Winding Way. For more information, call (916) 484-8646.

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